

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-025378**Date Inspected:** 29-Jul-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** Steve Mc Connell**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** SAS Tower**Summary of Items Observed:**

Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at the Self Anchored Suspension (SAS) job site as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

At Tower Base Elevation 13Meters Shear Plate Electro Slag Welding (ESW);

This QA was present at the Tower Base to observe the Electro Slag Welding of the T-joint weld number S-041 located at 'S' position per ABF weld map. The weld joint to be welded is a 60mm shear plate to 60mm Tower skin plate 'E' T-joint at corner 'D' and 'E' of Tower South Shaft. ABF intends to implement Caltrans approved welding procedure ABF-WPS-ESW-120T in performing the ESW.

Upon QA's arrival, ABF personnel were noted preparing to weld the shear plate butt joint by checking all the necessary electrical and water hose weld shoe cooling connections are all in place prior to commence ESW. The cooling water hoses were noted new with the ½" diameter supply line rated 200 psi while the ½" diameter return line was rated 250 psi. It was noted that three weld shoes were in position at each opposing side of the joint and so with the consumable guide tube that was placed in between the joint gap which was separated by consumable ceramic insulators. Other ABF personnel that were noted assisting the preparation of the ESW include ABF Senior Field Engineer Daniel Hester, Dr. Dan Danks and Bob Turpin of Oregon Institute of Technology.

The fit up alignment was previously checked by ABF QC John Pagliero and this QA. The root gap was measured from bottom to top and the result noted was 17.5 mm minimum and 25 mm maximum which deemed in

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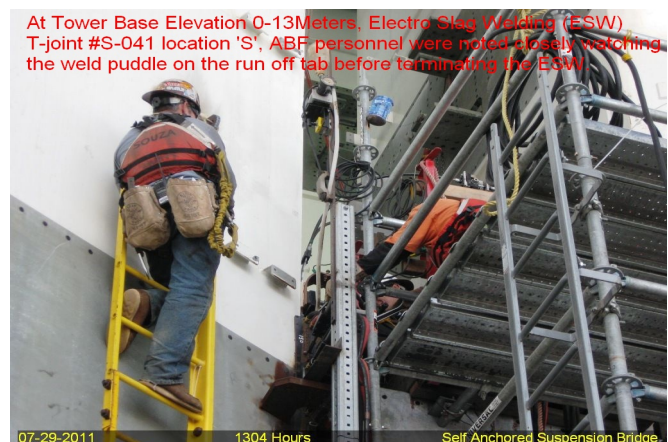
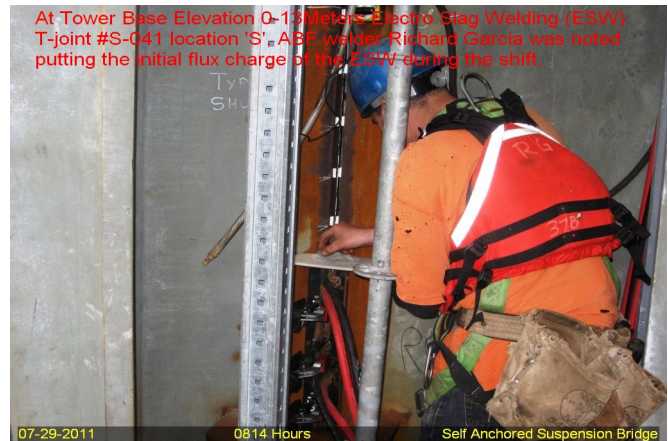
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compliance to the WPS.

At 0730 hours, ABF Operations Superintendent Dan Ieraci and ABF QC Steve Jensen performed the check list verification and noted it was all OK.

Since all the ABF personnel that are involved in the ESW operation are already familiar with their roles during welding, ABF Superintendent Dan Ieraci did not call for the usual pre-meeting prior welding but reminded ABF personnel through the radio to be wary in performing their usual respective tasks for the last ESW.

After the placement of the flux initial charge at around 0815 hours, firing of the ESW has started at 0833 hours and it was successful and that the welding parameters have stabilized and continued without a hitch until the completion at 1306 hours for a total ESW welding time of four (4) hours and thirty three (33) minutes. The surface profile of the completed ESW weld joint also appears satisfactory and deemed in compliance to the contract requirements.



Summary of Conversations:

This was the last ESW weld joint welded. ABF Superintendent Dan Ieraci congratulated ABF personnel who worked for the ESW for performing such a great job.

Comments

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This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact SMR Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Lizardo, Joselito	Quality Assurance Inspector
Reviewed By:	Levell, Bill	QA Reviewer
